

0300

#4



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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/003,446

DATE: 03/14/2002

TIME: 12:18:31

Input Set : A:\11283-015001.TXT

Output Set: N:\CRF3\03142002\J003446.raw

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4 <110> APPLICANT: Yoshida , Shigeo
5     Matsuyama, Tomoki
6     Abe, Tomoko
7     Ebisuzaki, Toshikazu
9 <120> TITLE OF INVENTION: GENOMIC DNA ANALYSIS PROGRAM
12 <130> FILE REFERENCE: 11283-015001
14 <140> CURRENT APPLICATION NUMBER: 10/003,446
C--> 15 <141> CURRENT FILING DATE: 2002-03-05
17 <150> PRIOR APPLICATION NUMBER: JP 2001-084370
18 <151> PRIOR FILING DATE: 2001-03-23
20 <150> PRIOR APPLICATION NUMBER: JP 2000-327632
21 <151> PRIOR FILING DATE: 2000-10-26
23 <160> NUMBER OF SEQ ID NOS: 16
25 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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28 <211> LENGTH: 12
29 <212> TYPE: DNA
30 <213> ORGANISM: Artificial Sequence
32 <220> FEATURE:
33 <223> OTHER INFORMATION: Synthetic DNA
35 <221> NAME/KEY: modified_base
36 <222> LOCATION: 4-9
37 <223> OTHER INFORMATION: n = a, g, c, or t
40 <400> SEQUENCE: 1
W--> 41 ccannnnnnnt gg                                12
43 <210> SEQ ID NO: 2
44 <211> LENGTH: 207
45 <212> TYPE: DNA
46 <213> ORGANISM: Arabidopsis thaliana (Columbia)
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50 ttcgggtgca tgggacacat cagtactcca gtgcatttcg ccctctgagt cagaataaat      120
51 atattttcta accctctctt taaaatgaaa agtgtatgtt ccctcgcgaa tctcagcaat      180
52 cacttgttct gattccacat attgatc                                          207
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55 <211> LENGTH: 163
56 <212> TYPE: DNA
57 <213> ORGANISM: Arabidopsis thaliana (Columbia)
59 <400> SEQUENCE: 3
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61 aaagaattgc gatagctaaa tgatgatgtg ccatatcggt tagccataaa ctttgcgttt      120
62 gtggatggaa tcccccaaga aggggttagaa tggcagttcc gga                          163
64 <210> SEQ ID NO: 4

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65 <211> LENGTH: 131
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71 tctgtcatct ttatcaagat ggttttactt cgtcggatat tcattcgagt atctggagca      120
72 cgaaatagat c                                          131
74 <210> SEQ ID NO: 5
75 <211> LENGTH: 134
76 <212> TYPE: DNA
77 <213> ORGANISM: Arabidopsis thaliana (Columbia)
79 <400> SEQUENCE: 5
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81 ctttctggct attcctcaat gccccggcta ttcacggaac gtgagaagcg aatgaataat      120
82 catctgcttc cgga                                          134
84 <210> SEQ ID NO: 6
85 <211> LENGTH: 189
86 <212> TYPE: DNA
87 <213> ORGANISM: Arabidopsis thaliana (Columbia)
89 <400> SEQUENCE: 6
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91 tctatttctc gattcaatag aagtccaacc aaagagggtga ataggggtccc aaataacgag      120
92 agatatgtaa aaagtaggtc agatttcgcc tattcctaatt cctaaatgga atgtaacgac      180
93 gtagggatc                                          189
95 <210> SEQ ID NO: 7
96 <211> LENGTH: 232
97 <212> TYPE: DNA
98 <213> ORGANISM: Arabidopsis thaliana (Columbia)
100 <400> SEQUENCE: 7
101 gatcagccac actgggactg agacacggcc cagactccta cgggaggcag cagtggggaa      60
102 ttttccgcaa tgggcgaaaag cctgacggag caatgccgcg tggaggtaga aggcctacgg      120
103 gtctgtgaact tcttttccca gagaagaagc aatgacggta tctgggggaat aagcatcggc      180
104 taactctgtg ccagcagccg cggtaataca gaggatgcaa gcgttatccg ga      232
106 <210> SEQ ID NO: 8
107 <211> LENGTH: 597
108 <212> TYPE: DNA
109 <213> ORGANISM: Arabidopsis thaliana (Columbia)
111 <400> SEQUENCE: 8
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113 agacaacctg gcgaactgaa acatcttagt agccagagga aaagaaagca aaagcgattc      120
114 ccgtagttagc ggcgagcgaa atgggagcag cctaaaccgt gaaaacgggg ttgtgggaga      180
115 gcaaaaaaag cgctctgtctg ctaggcgaaag cgggtggagtg ccgcacccta gatggcgaga      240
116 gtccagttagc cgaaagcatc actagcttat gctctgaccc gagtagcatg gggcacgtgg      300
117 aatcccgtgt gaatcagcaa ggaccacctt gcaaggctaa atactcctgg gtgaccgata      360
118 gcgaagtagt accgtgaggg aagggtgaaa agaaccacca tcggggagtg aaatagaaca      420
119 tgaaccgta agctcccaag cagtgggagg agccctgggc tctgaccgcg tgcctgttga      480
120 agaatgagcc ggcgactcat aggcagtggc ttggttaagg gaaccaccg gagccgtagc      540
121 gaaagcgagt cttcataggg caattgtcac tgcttatgga cccgaacctg ggtgatac      597
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130 acggctccgg tgggttccct taaccaagcc actgcctatg agtcgccggc tcatttcttca      120
131 acaggcacgc ggtcagagcc cagggtcctt cccactgctt gggagcttac ggtttcatgt      180
132 tctattttcac tccccgatgg ggggttcttt cacccttccc tcacggtaact acttcgctat      240
133 cggtcaccca ggagtattta gccttgcaag gtggtccttg ctgattcaca cgggattcca      300
134 cgtgccccat gctactcggg tcagagcata agctagtgat gctttcggct actggactct      360
135 cgccatctag ggtgcggcac tccaccgctt cgcctagcag cacgacgctt tttttgctct      420
136 cccacaaccc cgttttcacg gtttaggctg ctcccatctt gctcggcgct actacgggaa      480
137 tcgcttttgc tttcttttcc tctggctact aagatgtttc agttcgccag gttgtctctt      540
138 gcctgccccat ggattcagca gcagttcaaa aggttaacct attcgggaat ct          592
140 <210> SEQ ID NO: 10
141 <211> LENGTH: 232
142 <212> TYPE: DNA
143 <213> ORGANISM: Arabidopsis thaliana (Columbia)
145 <400> SEQUENCE: 10
146 tccggataac gcttgcatcc tctgtattac cgcggctgct ggcacagagt tagccgatgc      60
147 ttattcccca gataccgtca ttgcttcttc tctgggaaaa gaagttcagg acccgtaggc      120
148 cttctacctc cacgcggcat tgctccgtca ggctttcgcc cattgcggaa aattccccac      180
149 tgctgcctcc cgtaggagtc tgggccgtgt ctcagtccea gtgtggctga tc          232
151 <210> SEQ ID NO: 11
152 <211> LENGTH: 190
153 <212> TYPE: DNA
154 <213> ORGANISM: Arabidopsis thaliana (Columbia)
156 <400> SEQUENCE: 11
157 gatccctacg tcgttacatt ccatttagga ttaggaatag gcgaaatctg acctactttt      60
158 tacatatctc tcgttatatt ggacctatt cacctctttg gttggacttc tattgaatcg      120
159 agaaatagat ttgattgtcc atctttttga tataatatat attaatatat atataaggca      180
160 tccttccgga                                190
162 <210> SEQ ID NO: 12
163 <211> LENGTH: 134
164 <212> TYPE: DNA
165 <213> ORGANISM: Arabidopsis thaliana (Columbia)
167 <400> SEQUENCE: 12
168 tccggaagca gatgattatt cattcgcttc tcacgttccg tgaatagccg gggcattgag      60
169 gaatagccag aaaggatatt agggaatcgg tctgattcta tctctcttcc ttccgtttga      120
170 ataaaggaag gatc                                134
172 <210> SEQ ID NO: 13
173 <211> LENGTH: 215
174 <212> TYPE: DNA
175 <213> ORGANISM: Arabidopsis thaliana (Columbia)
177 <400> SEQUENCE: 13
178 gatcttgtgg gaagagtgtt gccaaattta tactgtccgc tatctcatag gtggctacgg      60
179 gccgcaccaa aacaaaaaac tttttcttgg ttgggtgtaat ccggttgaca taaatccaat      120
180 ttttaaattt tttggattcc ttcgagtttt ttttctctct tcctggcggt atcaagatgc      180
181 cactgtgtcg ggatatatta tctgtcttgt ccgga                                215

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184 <211> LENGTH: 618
185 <212> TYPE: DNA
186 <213> ORGANISM: Arabidopsis thaliana (Columbia)
188 <400> SEQUENCE: 14
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190 tcggttttat gtgattatca atcaagtaaa aagttattct atatatcaat ttttacatct      120
191 cctactaccg gtggagtgc agctagtttt ggtatgttgg gggatatcat tattgccgaa      180
192 ccctatgcct atattgcatt tgcgggtaaa agagtaattg aacaaacatt gaaaaaagcc      240
193 gtgcctgaag gttcacaagc ggctgaatct ttattacgta agggcttatt ggatgcaatt      300
194 gtaccacgta atcttttaaa aggtgttctg agcgagttat ttcagctcca tgcctttttt      360
195 cctttgaaca caaattaaat aaaatagaac ggtagtttta tcagaattaa acgaaaaccc      420
196 agaaaaatgc atttttcttt caaatcatct ttttttatcg atattcttgt ttactactca      480
197 gtaaacctct atcaacaagc taaaaagtga atttttttgg gggggaagtt caaattagac      540
198 tagacaaaca aaaaaagtt cattttcctc ccttgcttgc atatgtatag ataattcaaa      600
199 tatagataga tgcagatc                                     618

201 <210> SEQ ID NO: 15
202 <211> LENGTH: 323
203 <212> TYPE: DNA
204 <213> ORGANISM: Arabidopsis thaliana (Columbia)
206 <400> SEQUENCE: 15
207 gatctgggcc aagaagcact actgtaggga agttattgaa accattgaat tccgaatatg      60
208 gtaaaagtgc tcccggatgg ggaacgaccc ctttgatggg tgttgcaatg gctctatttg      120
209 cggatttcct atctattatt ttggagattt ataattcttc tgttctactg gatggaattt      180
210 cagtgaatta gactgagaag aatcttgaag ttctagcttt tagctcgata caaaaaagta      240
211 aagtatgcag gtctaacaat tttagcctat tctcctttgg tagttcgacc gcgaaatttt      300
212 tttctgcatt gtatatttcc gga                                     323

214 <210> SEQ ID NO: 16
215 <211> LENGTH: 2580
216 <212> TYPE: DNA
217 <213> ORGANISM: Arabidopsis thaliana (Columbia)
219 <400> SEQUENCE: 16
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221 taaaatcaaa tccgaaacat tgaatggttt ttaatacaaa aagaaaaaaa aatgtgatga      120
222 gtaagagaat acgaataaat atatcgacga ataatgtaa gaaatccgag ttatgtcatg      180
223 gaattggcta aggaatgtag catagaacct aagaatttct tgatgggacc aagtgatgag      240
224 gattaaaact ctcgatatag gctctctagt agactagcag tactgtgttt agattccata      300
225 tgctcttata atccttcaag tactcattgt taaaggtgga acttataoct tctatctata      360
226 atagtgatga gtgatgacga tcaaacattt catcttctct ctctctcttt tagtgcgcat      420
227 tatatatata tacaaacatt tgcattaata atctcatttc tctgtttatg ttccgttgtc      480
228 aatggataat ctttttttca ttcagtaagt aatctataga taatcttaca gttgagcttg      540
229 agcttgatat ttttataaga ggtgttttat acaacataat cgtgagctca aactcaagtg      600
230 atacaagaag atatgaatga tttacgctaa atacaagaaa aataacaatt taacaatttt      660
231 atccataaca tcaatattaa taatgattaa taaactatta catattttaga ttacaaataa      720
232 taatcaataa ggaaactatg tggatataga atttaaaaag tcagccaata tttaatctta      780
233 atttcaaaga tatgtacatc ccacctaatc ttttttttcc aaagtatttt ttacaatttc      840
234 ttcacgaagt caccgcgata agaataaact aatctactta tgcgatttct tatgttagtt      900
235 aacaacgagt cttataagtc atcaactagt aggtgacttg gttgtggaat ctctaattgg      960
236 rtggtaatat atcaactctc taatcgtttt cttaatacat tttccttata agattatcca      1020

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237	tcaataacat	ctcaacgcgt	gttattattgt	gggatgtctt	tgtcctagaa	ttaaagaata	1080
238	cattgactga	ttcacaattt	ttctagaaac	gtatccccaa	aatcttttgg	ccaataagg	1140
239	tattacaatt	ccacatttaa	ttgatattca	tagttaagtg	ggtatccata	gttctgagaa	1200
240	tcatataagt	ggacatccat	tggccaatat	ggactcatgg	agtctggtct	aacagttaag	1260
241	agggtcccat	attgaacaca	aaattttaatt	ttataatctt	ctatttgcgc	taagagatac	1320
242	aaaataatgt	aaattacgta	caaaacaact	aaaatagcaa	cacaactatt	tgaagggtgat	1380
243	tagataaatc	attatctcct	attatagtag	tacaaactac	aatataactt	ataagtttca	1440
244	agctagtggc	cattcaccga	ttcaagggat	acaagtagga	aagatttact	aatagatcta	1500
245	tctaaaaatt	aagttttatt	aaccatattt	ttttgttata	catcaaaata	atatgaactg	1560
246	tottattttt	catatagtat	tttagttatt	aaataaaata	tcaatatagc	aacctttttt	1620
247	ttagaaatga	agctccaaaa	ttaaatgttt	atgtaaaatg	ctctatattc	acgtagcaaa	1680
248	taaacagccg	gaaagctatc	catgaactgt	ttcttgacat	atataaaaaat	aaattaatgt	1740
249	tcattgagca	tgcaattctt	gcactaaatg	cccaattctt	ctattaacac	ttttatatac	1800
250	atagagacat	taccttccca	agaaaaagac	aaaaaaaaat	gaacagttta	atgcaaaaaa	1860
251	ttaggtatat	ccatgatgaa	acgtaacata	aataatccgg	acatgatttc	cctctcattc	1920
252	cttagcaaag	aaagttgaat	tccatgtcat	aaccattcaa	caaaacactt	ttcttttgc	1980
253	tcgtaagttt	tctctagtct	tctaaacatg	tatttaaact	atttcogagac	gtacacaact	2040
254	tgtccatttg	aattatggaa	gtaaaatcgt	atccacactt	accattatca	agctagcgac	2100
255	ctatttttct	tggccaaaagc	cattattatg	tgaactatat	aacgggtcaag	tgtataaatc	2160
256	agttttgtta	ccccaaaaaa	aaagggtgat	aaatcagttt	aaaatccggt	ttagttttga	2220
257	ccaaaatgat	tacacaactg	atctattata	caatcattta	atatactcca	tgtgtagtgg	2280
258	catagtggat	gtgtgcta	aacgttcgca	gactccgtgg	ttcgattcct	ctcgtccaac	2340
259	tagtttagtg	gtgagaaaaa	aggcctatat	ttgatttatt	ttctatatga	tttagatatt	2400
260	caccattaaa	ttaattagct	attgtttgac	caaaaaaaaaa	aaaaaaaaaa	aaattaatta	2460
261	gctatcttga	aacaattagt	acattgaatt	gaattcaaga	atcccaacgc	ataaggttcg	2520
262	ccacaaaact	gcgtcattcg	actttctagt	ttctaataat	gaggttccct	tgaatttatt	2580

VERIFICATION SUMMARY

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L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:41 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1